

Mineral Industry Surveys

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MOLYBDENUM IN MARCH 2000

Domestic production of molybdenum in concentrate in March 2000 was about 14% more than that of the previous month and was 25% less than that of March 1999, according to the U.S. Geological Survey. Producer stocks of molybdenum in concentrate, oxide, and other product forms were 9,900 metric tons at the beginning of 2000 and 8,750 metric tons at the end of March 2000.

Included in this Mineral Industry Surveys are U.S. production and shipments of molybdenum concentrates and materials, plus U.S. consumption, by end use, and stocks, by material, of molybdenum in the previous and current months; also included are trade data for the previous month. During the current month, Platt's Metals Week U.S. monthly average price for molybdenum concentrate was \$3.748 per kilogram (\$1.700 per pound). The average price for dealer molybdenum oxide was \$5.622 per kilogram (\$2.555 per pound), and that for dealer ferromolybdenum was \$7.606 per kilogram (\$3.450 per pound).

For the week ending May 15, 2000, Metals Week average price for dealer molybdenum oxide was \$5.732 per kilogram (\$2.600 per pound), and that for ferromolybdenum was \$7.601 per kilogram (\$3.475 per pound).

TABLE 1 U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS 1/

(Metric tons, contained molybdenum)

	1999		2000		
	January-			Year to	
	December	February	March	date	
Production	43,000	2,630	3,000	8,540	
Shipments: 2/					
Domestic	28,800	1,100	1,220	3,490	
Export	11,900	1,190	806	3,150	

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

 ${\bf TABLE~2} \\ {\bf U.S.~REPORTED~PRODUCTION~AND~SHIPMENTS~OF~MOLYBDENUM~PRODUCTS~1/} \\$

(Metric tons, contained molybdenum)

	1999			
	January-			Year to
	December	February	March	date
Gross production	39,800	3,460	4,170	11,200
Internal consumption 2/	20,500	1,920	2,080	5,910
Gross shipments	39,000	3,160	3,860	10,800

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 3 U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/

(Kilograms, contained molybdenum)

	Molybdic	Ferro molyb-	Ammonium and sodium	Molyb- denum		
End use	oxides	denum 2/	molybdate	scrap	Other	Total
2000, February:	0.1146	dellalli 2/	moryounce	бетир	o uner	10111
Steel:	-					
Carbon	31,100	23,900			3,190	58,200
High-strength low-alloy	28,800	8,560				37,400
Stainless and heat-resisting	255,000	44,300			4,760	304,000
Full alloy	155,000	174,000			2,330	332,000
Tool	W	9,730			1,450	11,200
Total	471,000	261,000			11,700	743,000
Cast irons (gray, malleable, and ductile iron)	1,970	30,100			763	32,900
Superalloys	50,300	W		(3/)	70,600	121,000
Alloys: (other than steels, cast irons, and superalloys)	-					
Welding materials (structural and hard-facing)		W			6	6
Other alloys	W	2,220			6,290	8,510
Mill products made from metal powder 4/					171,000	171,000
Cemented carbides and related products 5/					13	13
Chemical and ceramic uses:						
Pigments			2,180			2,180
Catalysts	77,300		W		W	77,300
Other	W				1,710	1,710
Miscellaneous and unspecified uses:						
Lubricants					11,000	11,000
Other	89,100	5,130	73,700		14,900	183,000
Grand total	689,000	298,000	75,900		288,000	1,350,000
Stocks, February 29, 2000	764,000	191,000	5,190	44,700	852,000	1,860,000

See footnotes at end of table.

^{2/} Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

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TABLE 3--Continued U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/

(Kilograms, contained molybdenum)

	M-1-1-1:-	Ferro	Ammonium	Molyb-		
End use	Molybdic oxides	molyb- denum 2/	and sodium molybdate	denum	Other	Total
	oxides	denum 2/	morybdate	scrap	Other	Total
2000, March: Steel:	-					
	25 100	25,000			2.100	64.200
Carbon	35,100	25,900			3,190	64,200
High-strength low-alloy	32,700	8,970				41,600
Stainless and heat-resisting	307,000	48,700			4,760	360,000
Full alloy	199,000	188,000			2,330	389,000
Tool	W	10,900			1,450	12,300
Total	573,000	282,000			11,700	867,000
Cast irons (gray, malleable, and ductile iron)	1,780	42,500			763	45,100
Superalloys	92,600	W		(3/)	91,300	184,000
Alloys: (other than steels, cast irons, and superalloys)	-					
Welding materials (structural and hard-facing)		W			6	6
Other alloys	W	6,770			6,290	13,100
Mill products made from metal powder 4/					190,000	190,000
Cemented carbides and related products 5/					15	15
Chemical and ceramic uses:	-					
Pigments			W			W
Catalysts	77,300		W		W	77,300
Other	W				1,710	1,710
Miscellaneous and unspecified uses:	-					
Lubricants					14,100	14,100
Other	98,200	5,130	77,500		14,900	196,000
Grand total	843,000	336,000	77,500		331,000	1,590,000
Stocks, March 31, 2000	635,000	212,000	5,720	33,300	846,000	1,730,000

W Withheld to avoid disclosing company proprietary data; included in "Other" of the "Miscellaneous and unspecified uses" category. -- Zero.

TABLE 4
U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES (including roasted concentrate), BY COUNTRY 1/

(Kilograms, contained molybdenum)

	1999	2000			
Country	January-December	January	February	Year to date	
Australia	41,100	6,540		6,540	
Belgium	4,740,000	193,000	353,000	547,000	
Brazil	66,800		2,690	2,690	
Canada	1,350,000	262,000	188,000	450,000	
Chile	2,420,000	5,000	1,250	6,250	
China	1,190,000	30,600	439,000	469,000	
Germany	122,000	287,000	23,500	311,000	
Italy	264,000	22,700	33,800	56,500	
Japan	2,320,000	190,000	178,000	368,000	
Korea, Republic of	210,000	590	885	1,480	
Mexico	129,000		1,630	1,630	
Netherlands	8,620,000	1,110,000	424,000	1,540,000	
Spain	25,100		11,400	11,400	
Sweden	613,000	94,100	23,800	118,000	
United Kingdom	5,530,000	370,000	253,000	622,000	
Other	207,000	590	14,000	14,600	
Total	27,900,000	2,580,000	1,950,000	4,520,000	

⁻⁻ Zero.

Source: Bureau of the Census.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Includes calcium molybdate.

^{3/} Included in "Other" of the "Superalloys" category.

^{4/} Includes ingot, wire, rod, and sheet.

^{5/} Includes construction, mining, oil and gas, metal working machinery.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

 ${\bf TABLE~5} \\ {\bf U.S.~EXPORTS~OF~FERROMOLYBDENUM,~BY~COUNTRY~1/}$

(Kilograms, contained molybdenum)

	1999	2000				
	January-December	January	February	Year to date		
Australia	20,900	1,140		1,140		
Canada	5,020,000	50,300	55,800	106,000		
China	3,270,000					
Japan	3,230,000	5,150	7,220	12,400		
Korea, Republic of	168,000					
Mexico	654,000	4,330	5,190	9,520		
Other	8,470					
Total	12,400,000	60,900	68,200	129,000		

⁻⁻ Zero.

Source: Bureau of the Census

 ${\bf TABLE~6}$ U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS 1/

(Kilograms unless otherwise specified)

	January-December 1999			February 2000			
	Gross	Contained	Value (c.i.f.)	Gross	Contained	Value (c.i.f.)	
Material	weight	molybdenum	(thousands)	weight	molybdenum	(thousands)	
Ore and concentrates roasted	8,020,000	5,090,000	\$39,600	477,000	305,000	\$1,770	
Ore and concentrates other	2,710,000	1,480,000	7,810	508,000	299,000	1,580	
Molybdenum chemicals:							
Oxides and hydroxides	1,180,000	NA	9,610	178,000	NA	1,170	
Molybdates of ammonium	1,240,000	684,000	8,980	246,000	139,000	1,290	
Molybdates (all others)	192,000	114,000	982	36,000	35,800	144	
Molybdenum orange	2,050,000	NA	7,950	208,000	NA	845	
Ferromolybdenum	7,690,000	4,830,000	44,000	464,000	299,000	1,960	
Molybdenum powders	110,000	103,000	3,210	8,230	8,080	227	
Molybdenum unwrought	145,000	137,000	2,110				
Molybdenum waste and scrap	296,000	292,000	4,080	4,000	3,980	50	
Molybdenum wire	5,530	NA	500	37	NA	16	
Molybdenum other	7,850	NA	1,650	43	NA	74	
Total	23,700,000	12,700,000	130,000	2,130,000	1,090,000	9,130	

NA Not available. -- Zero.

Source: Bureau of the Census.

 $^{1/\,\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

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